

DETAILED ACTION

Election/Restrictions

1. Claims 39 and 49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse as mentioned in the office action mailed on September 2, 2009.

If applicants adopt all of the examiner's suggested claim amendments below, claim 39 would be no longer withdrawn from consideration because claim 39 would be dependent upon generic claim 25.

Claim Status Identifiers

2. The amendment filed on March 8, 2010 includes incorrect status identifiers. Claim 39 should have been labeled such as (Withdrawn, currently amended) because it was currently amended. Claims 40, 43 and 45 should have been labeled such as (Previously presented) because they had no amendment markings and were thus NOT currently amended. And, claim 49 should have been labeled (Withdrawn, currently amended) because it was currently amended. In the response to this office action, the status identifiers for the claims should identify the current status of the claims as if the above status identifiers were used. For example, in the response, if no further amendments are made to claim 49, claim 49 should be labeled (Withdrawn, previously presented). For example, in the response, if claim 39 is amended, claim 39 should be labeled (Withdrawn, currently amended).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 25-29, 31-38 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites "the common cylindrical ring" which lacks antecedent basis making it unclear to what it refers. Further, it is not clear how the common cylindrical ring is structurally related to the other claimed elements. The examiner suggests inserting the recitations of claim 29 prior to "the common cylindrical ring" in claim 25 to provide antecedent basis therefor, and then cancelling claim 29.

Claim 31 is indefinite because it is dependent upon cancelled claim 30. The examiner suggests making claim 31 dependent upon claim 25 if the examiner's amendment suggestions above are adopted. Note that such suggestions provide antecedent basis for "the common cylindrical ring" recited in claim 31.

Claim 44 recites "the baffle" which lacks antecedent basis making it unclear to what it refers. The examiner suggests making claim 44 dependent upon claim 43.

If applicants adopt the examiner's suggested claim amendments to claim 25 above, claim 39 would be considered because it would be dependent upon an allowable generic claim. In this case, claim 39 would be indefinite because it is dependent upon "Claim 2 25", and the examiner suggests changing "Claim 2 25" to --Claim 25--.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035).

Richter (US 4,937,035) discloses a device for producing multilayer, coextruded, tubular preforms made of thermoplastic material, with a coextrusion head with several essentially coaxially arranged flow channels (4.A, 4.B, 4.C), each of which is fed from an individual inlet opening (4.1A, 4.1B, 4.1C) with a material melt, which is annularly distributed in a distributor ring (not labeled but shown in the figs. 1 and 3; for example "C" in fig. 3 points to a distributor ring but "C" is disclosed for material layer C) and flows along an annular conical frustum (not labeled but shown in figs. 1 and 3), wherein the material melts flow into a common annular flow channel 6 that widens like a funnel, wherein the funnel-shaped, annular common flow channel is bounded by an inner and outer conical frustum surface (figs. 1 and 3), with an annular accumulation chamber (defined by accumulation chamber wall 1), in which a displaceable annular piston 4 can reciprocate, and with an annular discharge channel (not labeled but shown in figs. 1-3) that follows the annular accumulation chamber and has an annular extrusion orifice (not labeled but shown in figs. 1-3) that can be closed (right side of figs. 1 and 3) by nozzle adjusting cylinder 8; wherein, when viewed in a longitudinal section through the coextrusion head, a first angle between the vertical and the inner conical frustum

surface is smaller than a second angle between the vertical and the outer conical frustum surface (fig. 3). In instant fig. 1 of applicant's specification, the point of widening 32 is radially closer to the torpedo 6 than to the accumulator jacket 8, and the structure defining the inner conical frustum surface 36 has a thickness in a radial plane that is smaller than the thickness (in the same radial plane) of the structure defining the outer conical frustum surface 38. These features in instant fig. 1 enable the first angle to be smaller than the second angle. In fig. 3 of Richter (US 4,937,035), looking at the left portion of the piston 4, the point of widening is radially closer to the torpedo 2 than to the accumulator jacket 1, and the structure defining the inner conical frustum surface has a thickness in a radial plane that is smaller than the thickness (in the same radial plane) of the structure defining the outer conical frustum surface. Thus, fig. 3 of Richter (US 4,937,035) shows the first angle being smaller than the second angle. However, Richter (US 4,937,035) does not disclose the first angle being about 0°.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the first angle of Richter to be about 0° because where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

7. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of Siard (US 4,472,129).

Richter (US 4,937,035) discloses a device for producing multilayer, coextruded, tubular preforms made of thermoplastic material, with a coextrusion head with several essentially coaxially arranged flow channels (4.A, 4.B, 4.C), each of which is fed from an individual inlet opening (4.1A, 4.1B, 4.1C) with a material melt, which is annularly distributed in a distributor ring (not labeled but shown in the figs. 1 and 3; for example "C" in fig. 3 points to a distributor ring but "C" is disclosed for material layer C) and flows along an annular conical frustum (not labeled but shown in figs. 1 and 3), wherein the material melts flow into a common annular flow channel 6 that widens like a funnel, wherein the funnel-shaped, annular common flow channel is bounded by an inner and outer conical frustum surface, with an annular accumulation chamber (defined by accumulation chamber wall 1), in which a displaceable annular piston 4 can reciprocate, and with an annular discharge channel (not labeled but shown in figs. 1-3) that follows the annular accumulation chamber and has an annular extrusion orifice (not labeled but shown in figs. 1-3) that can be closed (right side of figs. 1 and 3) by nozzle adjusting cylinder 8. However, Richter (US 4,937,035) does not disclose the baffle and adjusting device, as recited by the instant claims.

Siard (US 4,472,129) discloses a device (fig. 1), wherein an annular groove 38 is provided in an outer wall in the vicinity of a respective flow channel, which is configured as an annular conical frustum (see fig. 1), and the annular groove holds an elastic baffle 44, which can be moved into the annular conical frustum to throttle the flow of the

material melt, wherein the inside diameter of the elastic baffle 44 can be varied by means of an adjusting device 56.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Richter (US 4,937,035) with the baffle and adjusting device of Siard (US 4,472,129) because such a modification is well known and conventional in the extrusion art and would provide an alternative configuration known to be operable in the art for enabling throttling of the material flow.

8. Claims 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of EP 0 530 582.

Richter (US 4,937,035) discloses a device for producing multilayer, coextruded, tubular preforms made of thermoplastic material, with a coextrusion head with several essentially coaxially arranged flow channels (4.A, 4.B, 4.C), each of which is fed from an individual inlet opening (4.1A, 4.1B, 4.1C) with a material melt, which is annularly distributed in a distributor ring (not labeled but shown in the figs. 1 and 3; for example "C" in fig. 3 points to a distributor ring but "C" is disclosed for material layer C) and flows along an annular conical frustum (not labeled but shown in figs. 1 and 3), wherein the material melts flow into a common annular flow channel 6 that widens like a funnel, with an annular accumulation chamber (defined by accumulation chamber wall 1), in which a displaceable annular piston 4 can reciprocate, and with an annular discharge channel (not labeled but shown in figs. 1-3) that follows the annular accumulation chamber and has an annular extrusion orifice (not labeled but shown in figs. 1-3) that can be closed

(right side of figs. 1 and 3) by nozzle adjusting cylinder 8. However, Richter (US 4,937,035) does not the feeding device, as recited by the instant claims.

EP 0 530 582 discloses a device for producing multilayer, coextruded, tubular preforms (figs. 5 and 6), wherein inlet openings 240, 257, 259 are connected with feeding devices which have feed recesses 234, 237, 239, which further convey the material melt to the inlet openings during the stroke of an annular piston (fig. 5), wherein material melt is supplied to the feeding devices through rigidly connected extruder lines 212, 213, 215, wherein the feed recess has a length equal to the stroke of the annular piston (fig. 5). As shown in figs. 5 and 6, the feed recesses are in an integral element 214 which is rigidly connected with a coextrusion head. It would have been well within an artisan of ordinary skill to make the integral element 214 in separable annular segments because the mere fact that a given structure is integral does not preclude its consisting of various elements, Howard et al. v. Detroit Stove Works, 150 U.S. 164. It would have been well within an artisan of ordinary skill to space circumferentially two feeding devices to be arranged diametrically to each other because EP 0 530 582 (fig. 6) discloses that feeding devices can be spaced circumferentially and/or because it is obvious to shift location of parts when operation of the device is not otherwise modified, In re Japikse, 86, USPQ 70.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Richter (US 4,937,035) with feeding devices, as disclosed by EP 0 530 582, because such a modification is well known and

conventional in the extrusion art and would provide an alternative configuration known to be operable in the art for enabling feeding of the inlet opening.

Allowable Subject Matter

9. Claims 25-29 and 31-38 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter: if applicants adopt all of the examiner's suggested claim amendments above, then the prior art of record would not teach or reasonably suggest, the device as recited by claims 25-29 and 31-38, particularly wherein a region of quieted flow, which is formed as a common cylindrical ring, is provided between the mouth, at which several material melts come together, and the point of widening, at which the combined material melts enter the common flow channel, which widens like a funnel, wherein each flow channel opens into a first cylindrical ring, and wherein the cross-sectional area of the common cylindrical ring is equal to the sum of the cross-sectional areas of the first cylindrical rings.

Response to Arguments

11. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that, with respect to claim 32, Richter (US 4,937,035) does not disclose or suggest defining the annular volume for the common annular flow channel between the inner conical frustum surface and the outer conical frustum surface as asymmetrical truncated cone volumes. However, instant claim 32 does NOT recite

asymmetrical truncated cone volumes, and thus such arguments are not commensurate in scope to instant claim 32 and are moot. Claim 32 does recite that the first angle is smaller than the second angle, as recited therein. In instant fig. 1 of applicant's specification, the point of widening 32 is radially closer to the torpedo 6 than to the accumulator jacket 8, and the structure defining the inner conical frustum surface 36 has a thickness in a radial plane that is smaller than the thickness (in the same radial plane) of the structure defining the outer conical frustum surface 38. These features in instant fig. 1 enable the first angle to be smaller than the second angle. In fig. 3 of Richter (US 4,937,035), looking at the left portion of the piston 4, the point of widening is radially closer to the torpedo 2 than to the accumulator jacket 1, and the structure defining the inner conical frustum surface has a thickness in a radial plane that is smaller than the thickness (in the same radial plane) of the structure defining the outer conical frustum surface. Thus, fig. 3 of Richter (US 4,937,035) shows the first angle being smaller than the second angle.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH LEYSON whose telephone number is (571)272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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